

Please amend claims 27, 29, 35, and 41 as follows:

Sub 101
27. (Twice Amended) A method of etching oxide using a polymer, the method comprising:

disposing a patterned semiconductor substrate in a high density plasma etcher, said substrate comprising a silicon layer with a gate stack structure disposed thereon, said gate stack structure being encapsulated by silicon nitride, and layered with an oxide;

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providing a hydrofluorocarbon gas into said high density etcher;

selectively removing portions of said oxide by pulsing a fluorocarbon gas; wherein:

said pulsing imparts a time varying flow rate to said fluorocarbon gas for a plurality of periods of said time varying flow rate; and

said fluorocarbon gas forms a protective layer; and

wherein the pulsing of said fluorocarbon gas causes said hydrofluorocarbon gas to have cyclical concentrations within said high density etcher.

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29. (Twice Amended) The method as defined in Claim 27, wherein said hydrofluorocarbon gas is pulsed into said high density etcher so that the hydrofluorocarbon gas pulses alternate with the fluorocarbon gas pulses and wherein pulsing said hydrofluorocarbon gas imparts a time varying flow rate to said hydrofluorocarbon gas for a plurality of periods of said time varying flow rate.

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C15

35. (Twice Amended) An etching method comprising:
exposing a substrate to a plurality of gases, wherein at least one of said gases is pulsed and said pulsing imparts a time varying flow rate to said at least one gas for a plurality of periods of said time varying flow rate; and wherein
at least one of said gases comprises an etchant gas selected from the group consisting of a hydrofluorocarbon and a fluorocarbon; and
at least one of said gases comprises a polymer forming gas for depositing a protective layer.

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C19

41. (Once Amended) A method to control etch profile while etching a microelectronics substrate, the method comprising:
providing an etch chamber and a microelectronics substrate disposed therein;
pulsing into said etch chamber a carbon containing polymer gas suitable for:
forming a deposit on at least a portion of said microelectronics substrate; and
etching said microelectronics substrate;
wherein said pulsing imparts a time varying flow rate to said gas for a plurality of periods of said time varying flow rate, thereby causing said gas to alternately form a deposit on at least a portion of said microelectronics substrate and etch said microelectronics substrate.

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